## **BIOMOLECULE MICROARRAY**

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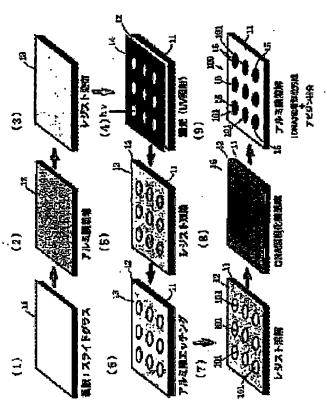
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## Abstract of JP2002153272

PROBLEM TO BE SOLVED: To provide a biomolecule microarray which can be used for quantitative analyses and has a high S/N ratio. SOLUTION: A photolithography technique and an etching technique are used to form an immobilizing film 14 in which avidin molecules are immobilized in a single layer at only specific probe biomolecule adhesion-desired sites 101 on the surface of a slide glass substrate 11, thus obtaining the surface-treated substrate 100. Since the areas and shapes of the specific sites all are uniform, the numbers of the biotin molecules immobilized on the specific sites 101 are also approximately uniform. Thereby, the numbers of the avidin molecoles bound to the specific sites 101 are identical. The specific sites 101 of the surface- treated substrate 100 are spotted with a solution containing probe DNA treated with biotin to obtain the DNA microarray. Since the numbers of the avidin molecules immobilized on the specific sites 101 are identical in the DNA microarrays, the number of probe DNAs 21 bound to the specific sites 101 is also identical.



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